NATIONAL ASSOCIATION OF THE DEAF

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November 27, 1996

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: In the Matter of Implementation of Section 255
of the Telecommunications Act of 1996
WT Docket No. 96-198

Dear Mr. Caton:

Enclosed please find an original and four copies of the Reply Comments of the National Association of the Deaf in Response to the Notice of Inquiry in the above captioned proceeding.

I would appreciate your referring all correspondence regarding this matter to my attention.

Sincerely,

Karen Peltz Strauss

Karen Peltz Strauss
Legal Counsel for Telecommunications Policy

ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Implementation of Section 255 of the	)	
Telecommunications Act of 1996	)	
	)	WT Docket No. 96-198
Access to Telecommunications Services,	)	
Telecommunications Equipment, and	)	
Customer Premises Equipment	)	
By Persons with Disabilities	)	

REPLY COMMENTS OF THE NATIONAL ASSOCIATION OF THE DEAF

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SUMMARY

Parties to this proceeding sent a clear message to the Federal Communications Commission (FCC or Commission) that guidance is needed with respect to the obligations of telecommunications manufacturers and service providers under Section 255. Such guidance need not be in a form that restricts technological innovation or that hinders industry competition. Rather, FCC rules can be crafted in a way that ensures that companies incorporate the concepts of universal design into the earliest stages of product and service development, and still leave wide open the manner in which access can be achieved. At the same time, FCC guidelines should not be voluntary. History has shown the need for mandatory guidelines; time and again, marketplace competition has proven ineffective in providing access solutions. At best, a voluntary mechanism will result in inconsistent and arbitrary compliance with Section 255.

Telecommunications companies should be required to prepare Accessibility Impact Statements that are filed with the FCC and made available to the public upon request. Among other things, such statements should contain documentation on steps taken to achieve access, accessibility and compatibility features, and the reasons why particular products or services are not accessible.

An advisory panel or coordination point from which companies can receive assistance in the development of accessible products and services would contribute to much needed coordination between industry and consumers. Efforts to coordinate access solutions should also take place between and among service providers, equipment and

CPE manufacturers, and manufacturers of specialized customer premises equipment.

Section 255 does not take a market or company-wide approach to accessibility; nor does it permit a company to choose between providing accessibility or compatibility features in the first instance. Rather it directs manufacturers and service providers to make their individual products and services accessible to and usable by as many individuals as is readily achievable. Where a company can prove that doing just that is not readily achievable, it should be required to offer consumers with disabilities a broad range of choices in the features and prices for offerings which can be made accessible. The costs for such products and services should be no greater than the costs for functionally equivalent offerings.

Congress' commitment to universal telecommunications service for all Americans evidences its intent to include within the scope of Section 255 both software used to perform telecommunications functions and the myriad of services currently considered "enhanced." Failure to employ this interpretation of the law would seriously impair the goals of this Section.

The FCC should coordinate accessibility requirements with other nations, and serve as a model itself for world-wide accessibility. Finally, the Commission should create an alternative, streamlined procedure for the filing of formal complaints under Section 255. This procedure should exclude charges which currently exist for the filing of formal complaints.

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REPLY COMMENTS OF

THE NATIONAL ASSOCIATION OF THE DEAF

The National Association of the Deaf hereby submits these reply comments to the Federal Communication Commission's (FCC's or Commission's) Notice of Inquiry (NOI) in the above captioned proceeding.

I. Parties to this Proceeding Seek Clear FCC Guidance on Section 255

In response to its NOI in this proceeding, the FCC received numerous requests from both industry and consumers for clear guidance with respect to the obligations of telecommunications manufacturers and service providers under Section 255. See e.g., Northern Telecom (Nortel) at 5; Ericsson at 6; Cellular Telecommunications Industry Association (CTIA) at 8-9; Consortium of Citizens with Disabilities (CCD) at 4; Omnipoint Corporation (Omnipoint) at 4 n.3; NYNEX at 6-7. As explained by Pacific Telesis

(Pacific), it is critical for the FCC and the Architectural and Transportation Barriers Compliance Board (Access Board) to provide guidelines that will "serve [ ] as a baseline for companies to begin tackling access issues." Pacific at 23; see also NYNEX at 7 (guidelines will enable industry to "quickly and more efficiently introduce accessible products.") Without such guidance, adherence to the law by telecommunications companies will be inconsistent, and resolution of complaints on a case-by-case basis will be arbitrary. See Nortel at 10.

A. Section 255 Requires Consideration of Access Needs at the Earliest Stages of Design and Development

Section 255 directs manufacturers to ensure that their equipment is "designed, developed, and fabricated to be accessible and usable by individuals." 47 U.S.C. §255(b). Both this and the requirement for service providers to ensure that their services are accessible and usable to individuals with disabilities require consideration of access needs at the earliest possible stages of service and product design and development.

Enforcement of Section 255 which relies only upon a case-by-case complaint process simply will not fulfill Section 255's mandates for early consideration of access needs. Rather, we agree with the many consumers and companies responding to this NOI who emphasized that FCC guidance will be needed to provide manufacturers and service providers with a full understanding of their access obligations throughout these early stages. One such commenter - Pacific Telesis - pointed out that when disability access issues are considered at the design process, barriers to such access can ultimately be incorporated into the design plans for second generation products, even where access was not readily achievable for the initial roll out of those products. Pacific noted the disadvantages of

ignoring access at these early stages: "attempting to engineer *post hoc* access and use 'solutions' for end-stage, or already deployed, products and services will almost invariably require retrofitting, delays in bringing the products or services to market, less functional access modes, interim solutions, and generally much greater overall cost." Pacific at 8.[1] NYNEX's comments also emphasized the importance of universal design principals, and suggested that such principals be incorporated into the FCC's guidelines themselves. See NYNEX at 7. Finally, the Consumer Electronics Manufacturers Association (CEMA) noted that providing for access is "*much less expensive* if done at the initial design stage, rather than added on at a later date to an existing product." CEMA at 15. See also Telecommunications Industry Association (TIA) at 6 ("[u]sualy it will be cheaper to develop the accessibility feature from the outset of design, rather than retrofitting it to existing models"); Siemens Business Communication Systems (Siemens) at 3 ("[a]ccess considerations must be incorporated into the product design process itself at the earliest possible time"). Should the FCC decide not to provide the guidance needed to enable companies to incorporate access principals at the design and development stages, its only recourse will be to require extensive retrofitting for access once equipment and services have been deployed - a result which will be unfortunate and burdensome for industry and consumers alike.

[1] For all of these reasons, it would be foolish to adopt Microsoft's suggestion that every piece of telecommunications equipment be exempt from the requirements of Section 255 during its first year on the market. Microsoft at 9-10. Microsoft's proposal would result in extensive efforts to retrofit these inaccessible products after that first year.

B. Rules Need not Restrict Innovation and Competition

Telecommunications companies that requested FCC guidance on Section 255 typically sought such clarification in the form of flexible guidelines or policy statements while opposing the promulgation of rules for this purpose. See e.g. Nortel at 14; Ericsson at 6. Because of the rapid pace of technological and market developments, these parties expressed the fear that rules would be too rigid and would consequently impede innovation by overspecifying the technological standards for accessibility. See e.g. Siemens at 3; TIA at 2-3; CEMA at 14; Bell Atlantic at 3.[2] CTIA expressed the fear that "rules would favor one access solution to the exclusion of others, creating entry barriers to the market." CTIA at 13. CTIA summarized by explaining: "[r]ules connote standards, and standards can carry the ability to freeze technology and innovation creating a static service and equipment market for the disabled community." Id.

The NAD submits that FCC rules can provide clear guidance to consumers and industry on Section 255's requirements without hindering technological innovation or stifling competition. FCC rules do not need to be either rigid or inflexible. Rather, they can be crafted in a way to ensure that companies incorporate the concepts of universal design into their earliest stages of product and service development, and still leave wide open the manner in which access will be achieved. Indeed, we agree with the Information

[2] Lucent Technologies' (Lucent) comments suggested that the drafting of regulations is premature because not enough experience exists with respect to incorporating access into telecommunications equipment and services. See Lucent at 3. This statement ignores significant strides in access technologies that have taken place over the past few years. In any event, little, if any experience is necessary with respect to the promulgation of rules that require companies to adhere to certain processes in the design, development, and distribution of their products and services.

Technology Industry Council (ITIC) that there is no "standard" disabled person. Thus, so long as FCC guidance encompasses the intent of the Telecommunications Act to provide equal access for persons with disabilities, it should "be flexible enough to permit the production of equipment targeted to installation settings that vary and individuals with disabilities whose needs vary," ITIC at 6-7, and should recognize that many of the technologies for access solutions are still in their infancy. See Siemens at 5.

Rather than favor one technological solution over another, FCC rules can establish the processes required to incorporate accessibility and compatibility features under Section 255, and, where applicable, set forth guidance on the types of access needed for specific telecommunications products and services.[3] As noted in our earlier comments, for example, telecommunications companies should be required to ensure that where products and services are accessible though auditory means, they are accessible through visual means as well. See NAD at 19. Additionally, where the need to incorporate access for specific types of disabilities or commonly used specialized customer premises equipment is already known, the FCC should require such access, but nevertheless review any such specific rules on a periodic basis so as not to inhibit the development of new technologies. Imposing rules such as these hardly impedes innovation; rather it encourages such innovation by challenging members of the telecommunications industry to develop creative and readily achievable access solutions. For example, a requirement for digital wireless technologies to

[3] Additionally, we agree with Inclusive Technologies (Inclusive) that rules should not only cover the engineering of the product or service itself, but extend to the company's business practices as well. As Inclusive notes, the ability to access customer service, pay a bill, and receive general product information in accessible formats is just as important as access to the product or service itself. Inclusive at 6.

be compatible with TTYs does not direct manufacturers or service providers how to achieve accessibility; it simply directs them to achieve such access, and leaves open the competitive and innovative measures they can use to reach this result.

In sum, the NAD supports the comments of the various parties to this proceeding that have urged the FCC to issue regulations for both service providers and manufacturers. See CCD at 4; American Speech-Language-Hearing Association; Consumer Action Network; United Cerebral Palsy Association at 4; American Foundation of the Blind (AFB) at 5. As noted by the National Council on Disability (NCD), issuance of rules will demonstrate the Commission's serious attention to compliance with Section 255, "provide the clearest possible context for the clarification . . . of all pertinent rights and responsibilities by the public and industry [, . . .and] create the fullest possible framework for the handling and equitable resolution of any complaints that may arise under law. NCD at 6.[4] Were the Commission to issue only voluntary guidelines, members of the industry would remain free to ignore those guidelines at will. The consequence would be vagueness and uncertainty in the application of Section 255 and continued disregard for the need to provide accessibility.

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[4] Some of the parties commenting suggested that if the FCC does issue guidelines or rules, it should not do so before the Access Board has issued its guidelines on accessible telecommunications equipment See e.g. US West at 3; United States Telephone Association at 2. The Access Board's Telecommunications Access Advisory Committee (TAAC) will complete its negotiated rulemaking in January of 1997. The FCC can and should work closely with the Access Board to ensure the development of rules for telecommunications services that are consistent with the recommendations regarding telecommunications equipment put forth by the TAAC. But there is no reason for the FCC to wait until the completion of the Board's guidelines - which by law may be as late as August of 1997 - to begin and complete its own rulemaking on services. New

II. Competitive Forces in the Marketplace have Proven Ineffective in Providing Accessibility.

A small number of parties commenting in this proceeding suggested that the FCC need not promulgate rules or guidelines because competitive forces in the marketplace will ensure that products and services are made accessible for individuals with disabilities. See CTIA at 5; Microsoft at 2-7. However, the very enactment of Section 255 itself was a response to the historic failure of industry to consider the needs of individuals with disabilities in the design and development of telecommunications products and services.

This is not the first time that Congress has recognized the need to intervene with respect to the rights of individuals with disabilities to receive access to telecommunications services. Title IV of the Americans with Disabilities Act (requiring nationwide telecommunications relay services), the Hearing Aid Compatibility Act (requiring certain telephones to be hearing aid compatible) and the Telecommunications Accessibility Enhancement Act (expanding the federal relay system) were all recognition of the fact that competition in the telecommunications marketplace is insufficient to meet the needs of consumers with disabilities. But perhaps the need for federal intervention - to counter the market's failure to address these needs - was best explained by Congress when it passed the Telecommunications for the Disabled Act of 1982.[5] The Telecommunications for the Disabled Act was intended to counter the potentially adverse effects of the FCC's

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telecommunications services and products are being introduced into the market at a dramatic pace; thus the Commission should act quickly in implementing Section 255.

[5] This Act was the first piece of federal legislation to ever address the telecommunications needs of persons with disabilities. 47 U.S.C. §610.

Computer II ruling, in which the Commission had ordered telephone companies to separate the sale and rental of customer premises equipment from their regulated services. Because many telephone companies had been offsetting the high costs of providing specialized telephone equipment with revenues from other services, it was feared that the FCC's action would result in requiring persons with disabilities to bear the full costs of their equipment. Congress recognized that competition would be insufficient to keep these prices down, and through legislation, allowed the states to require carriers to continue providing the needed subsidies. The House Report to the legislation explained:

> The Commission proposes to rely upon competition to provide telephone equipment at affordable prices. For most ratepayers, deregulation may indeed ensure a competitive market in telephone sets and eliminate subsidies for such sets from local rates. For the disabled, however, the ban on cross-subsidization could mean unregulated price increases on the costly devices that are necessary for them to have access to the telephone network.

H. Rep. No. 888, 97th Cong., 2d Sess. 3 (1982).[6]

Some parties to this proceeding have suggested that Congress' preference for relying on the marketplace is evidenced in other sections of the Telecommunications Act. See e.g. CTIA at 5-6; Microsoft at 6. Specifically, CTIA directs the Commission to Section 253 of the Act, and describes what it considers Congress' "substantial faith in competition rather than regulation" to meet consumer needs. CTIA at 6. This analysis fails to recognize that the very enactment of Section 255 was Congress' declaration that reliance

[6] Indeed, these Congressional statements directly contradict Microsoft's assertion that "[t]here has been no showing . . . that competitive forces will not generate a sufficient range of products optimized to meet the needs of persons with particular disabilities." Microsoft at 18-19. Microsoft also tried to argue that regulation is not needed because the federal government has enormous purchasing power to encourage the development of accessible

on the marketplace would not suffice for individuals with disabilities. Indeed, Section 255 takes a path which is different from much of the Telecommunications Act: rather than rely on the marketplace to create telecommunications access, it unequivocally sets forth a specific mandate for the inclusion of such access. The Commission should carry out that mandate by promulgating regulations which provide clear and uniform standards for manufacturers and service providers who are covered by this Section.

III. The FCC Should Require Accessibility Impact Statements

A number of parties responding to the NOI also commented on the need for a mechanism which enables telecommunications companies to certify or otherwise demonstrate their efforts to comply with Section 255's mandates. For example, Nortel suggested that manufacturers who must otherwise register their equipment with the FCC should be required to certify that their equipment complies with the FCC's Section 255 guidelines; they suggested using Part 68 as a paradigm for this purpose. Nortel at 7; Sprint at 8. Pacific Telesis, TIA, and Siemens similarly proposed a Declaration of Conformity, which would require a company to self-certify its compliance.[7] Pacific at 25; TIA at 10; Siemens at 5-6.

The NAD supports a requirement for manufacturers and service providers to certify their compliance with Section 255,[8] although we do not, at this point, make

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products. Yet Microsoft pointed to a federal regulation that was needed to force those purchases to occur in the first place. Microsoft at 29 n. 41, citing 48 C.F.R. §39.101(1996)

[7] Use of a Declaration of Conformity for telecommunications equipment is under serious consideration by the TAAC as well.

[8] Unlike those who suggested that such certification be voluntary, see e.g., Siemens at 5, we propose that the FCC incorporate a requirement for such certification in its regulations on Section 255.

recommendations as to the form that this certification should take. We do urge that a self-certification requirement not exist within a vacuum. Rather, a company's self-certification should be the culmination of its efforts to achieve access during the design, development, and deployment of its products or services, and should be supported by documentation to that effect. We propose that this documentation be compiled in an Accessibility Impact Statement,[9] which would be prepared on a regular basis, filed with the FCC and made available to the public upon request.

The National Council on Disability has proposed that the certification process include complete documentation of steps taken to achieve access, including information about a company's design process, accessibility planning, and evidence as to the testing and other procedures taken to verify access. See generally, NCD at 26. The proposed Accessibility Impact Statement should contain such information, and also include information on the company's efforts to consult with consumers with disabilities, a description of its accessible products and services, a description of its customer support for the usability of its products and services, an explanation of why particular products or services may not be accessible, and a description of features for compatibility with peripheral devices. As noted by Pacific Telesis, documentation of this type would provide a "paper trail" which would enable individuals to ascertain where access features should have been contemplated. Moreover, the availability of such documentation would "facilitate the resolution of complaints . . . and promote greater awareness of access issues." Pacific at

[9] Such statement is similar to the Annual Accessibility Assessment Statement proposed by NYNEX (at 8), and the Customer Accessibility Impact Report proposed by Pacific Telesis (at 25-26).

26. In this fashion, the FCC would be able to ensure that good faith efforts in product design were made to provide access.

IV. The FCC Should Facilitate Coordination Among Manufacturers, Service Providers and Individuals with Disabilities.

We support the many parties to this proceeding who proposed the creation of an advisory panel or coordination point from which companies could receive assistance in the development of accessible products and services. See Siemens at 8; Personal Communications Industry Association (PCIA) at 8-9. A number of the parties commented favorably on their experiences with obtaining information from consumers who are directly knowledgeable about accessibility issues. For example, AT&T noted that, in addition to its Consumer Advisory Panel on Disability Issues, which has provided advice on accessible design for a wide range of situations, AT&T has engaged in focus groups, partnerships with state offices on disability affairs, and interactive forums with consumers with disabilities. AT&T at 7-8. Similarly, consultations between Pacific Telesis and consumers with disabilities successfully resulted in a talking adjunct for its Caller ID for persons with vision disabilities. Pacific at 6.

Other parties who responded to the NOI similarly emphasized the benefits of early consultation with individuals with disabilities. PCIA noted that involving consumers in the guidelines process will "ensure that the diverse needs of Americans with disabilities are taken into account prior to the issuance of guidelines, thereby preventing the need for expensive and wasteful retrofitting." PCIA at 4. Others went further to suggest that the FCC assist in the creation of a mechanism for interaction between industry members and consumers. See e.g., ITIC at 8. We agree.

A mechanism by which consumers can share information about their access needs and companies can share information about possible access solutions would go a long way toward expanding access to telecommunications products and services. Members of the TAAC have contemplated that this mechanism would serve as a "coordination point" for information and the development of accessible features and solutions. See also PCIA at 8-9. Among other things, the coordination point could be responsible for developing and coordinating accessibility standards and training programs, and for serving as a clearinghouse for collecting and distributing information on accessibility solutions. See e.g., ITIC at 8; Lucent at 4 ("Commission policy should encourage service providers, manufacturers, and organizations representing the interests of individuals with disabilities to establish a forum to facilitate the exchange of information regarding solutions to barriers to accessibility"); Microsoft at 32-33 (supporting the development of a national database of the latest developments in accessibility technology). Additionally, Pacific Telesis has proposed that such panel assist in the informal resolution of complaints by notifying industry of problems as they arise, or by convening a task force, when necessary. Pacific at 27; Siemens at 8. Although we support the use of an consumer/industry panel to informally resolve disputes, we caution that it should not, under any circumstances, be mandated as a prerequisite to the filing of a formal complaint with the FCC.

Similarly, we support comments to the NOI that have urged coordination between service providers and equipment manufacturers to ensure effective access solutions. CEMA at 18 n. 38; AT&T at 11-12. The convergence of computer, television, video, and telephone services has and will continue to blur the distinction between telecommunications

equipment and telecommunications services. Coordination among manufacturers of network equipment, manufacturers of customer premises equipment, and network service providers will be necessary to ensure consistency and compatibility in the access features of these various offerings.[10] Industry efforts should be directed to creating a seamless telecommunications network for individuals with disabilities, one that would allow for the interoperability of access features between and among products and services.

Efforts must be made by service providers and manufacturers alike to develop access solutions. We strongly disagree with U.S. West's generalization that networks are not suited for access features because they serve "idiosyncratic end-user demand." U.S. West has proposed that access features be embedded in CPE, so that only individuals who need those features will be able to purchase them. U.S. West at 7. However, this analysis ignores the fact that at times, a telecommunications service simply may not become accessible without a change within the network. U.S. West's analysis is also flawed because it would continue to place the burden to locate access features on consumers, who, more than likely, will have to continue purchasing expensive peripheral devices to achieve basic access. Finally, U. S. West seems to assume that incorporation of an access feature into the network would bear a "hefty price tag," id., because it would only be used by a limited number of consumers. This assumption fails to recognize that, as with accessibility features that have been incorporated into mainstream offerings in the past, network features

[10] Coordination among the covered entities will hopefully reduce or eliminate the fingerpointing that has already begun in response to Section 255's coverage of both manufacturers and service providers. For example, parties to this proceeding already have begun to disagree about the extent to which a manufacturer should be able to argue that its

that are initially designed to meet accessibility needs will, in all likelihood, prove beneficial for much broader markets. The example of vibrating pagers – initially designed for individuals with hearing disabilities, but useful for individuals who need to be paged in movie theaters and other quiet locations - demonstrates this point.[11]

Finally, the FCC should require coordination among manufacturers of specialized customer premises equipment (SCPE), manufacturers of CPE and network equipment, and service providers. Already standards are critically needed to ensure compatibility between SCPE and various telecommunications products and services, such as digital wireless telephones and services. As noted by Inclusive Technologies, the FCC needs to provide CPE manufacturers and service providers with information about the types of SCPE and other peripheral equipment with which their products and services will require compatibility. Inclusive at 8; see also Nortel at 9 (the FCC should encourage greater dialogue between peripheral device manufacturers and equipment manufacturers).

V. Access to Telecommunications Equipment and Services Requires Parity in the Pricing and Features of Accessible Offerings

A number of companies responding to this proceeding suggested that Section 255's mandates should be satisfied if certain products and services of those companies are accessible for certain disabilities, but not accessible for other disabilities. See e.g., Nortel at 6; TIA at 7. These companies have argued that the FCC should not require every product

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failure to achieve access resulted from a service provider's failure to provide a particular service. See. e.g. MCI at 4; CEMA at 18 n.38.

[11] In any event, the deaf and hard of hearing market can hardly be called "idiosyncratic." One out of every nine Americans has some type of hearing loss. This is equal to 28 million deaf or hard of hearing Americans, representing a huge chunk of the 46 million Americans comprising the market of individuals with disabilities.

and service to be accessible to each and every individual with a disability. See also, AT&T at 11; Motorola at 19-21. Rather, they seem to suggest that the FCC should determine compliance by looking at what the company has done as a whole, and consider whether it has accommodated certain disabilities through some of its products or services. Other commenters have proposed that the FCC take a "market-wide view," in which compliance by covered entities would be determined based on the extent to which the market, as a whole, is meeting the needs of individuals with disabilities. ITIC at 15-16; Omnipoint at 8-9; Lucent at 15.

Consumers understand that, with current technologies, not every single device or service may be able to accommodate every single type of disability. As noted by PCIA, some needs may be mutually incompatible, PCIA at 6-7; for example a blind person will need a product that has voice output while a deaf person will require text output. Nevertheless, there are times when access for a variety of disabilities is, in fact, readily achievable in a single product or service.[12] For example, a number of companies are beginning to employ the use of interoperable components in equipment which permit the user to customize system options. For example, certain software applications - as well as decoder equipped televisions and personal computers - enable consumers with hearing disabilities to select information in a text or captioning format when it is otherwise presented in an audio format. Similarly, some computer applications permit blind individuals to select text modes in place of graphical interfaces. In these and other similar

[12] The increasing availability of alternative formats for communication is continuing to make universal access more attainable. Many telecommunications products and services will

instances, Section 255 unequivocally requires incorporation of such access features in order to make the products or services available for more than one type of disability.

Put simply, Section 255 directs manufacturers and service providers to make each of their individual products and services accessible to and usable by as many individuals with disabilities as is readily achievable. The Act is clear on this point - it does not look at compliance by the market as a whole; nor does it look at a manufacturers' or providers' entire set of offerings in determining compliance.

There may be times when it is readily achievable for a company to make some, but not all of the models in a given product line accessible to individuals with disabilities. Where this occurs, the FCC should require the company to offer consumers with disabilities a broad range of choices in the features and prices for those products which can be made accessible. As do all Americans, individuals with disabilities seek access to a wide range of products and services with varying levels of capabilities.[13]

The example of digital wireless products can help to illustrate this point. At present, digital wireless manufacturers are undertaking efforts to make their products compatible for individuals who wear hearing aids. Some of these manufacturers have suggested that while they do not expect to be able to make all of their units compatible, they expect to be able to offer a representative cross section of such telephones to hearing aid users. A second

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reach a significantly larger part of the population if careful consideration is given to the redundant use of text where audio is provided and vice-versa.

[13] As noted by Inclusive Technologies, all too often, people with disabilities have had fewer options when choosing among telecommunications offerings. Inclusive points out, for example, that there are far fewer options for TTY users than for users of conventional voice telephones. Indeed, at present, there are only two principal manufacturers of TTYs in

example is that of paging devices. Some paging devices alert persons with hearing disabilities that a call has come in with a vibrating feature. This feature should be available in a broad range of models with varying prices and functions. In these and other similar situations, the FCC should mandate that consumers not be limited to only the most expensive, feature-rich, or the least expensive, or basic devices.[14] Additionally, the FCC should require that the costs of telecommunications products with accessible features not be any greater than the costs for other products with comparable - or functionally equivalent - features and capabilities.

Nortel suggests that manufacturers be permitted to fulfill their Section 255 obligations by using peripheral devices, so that persons who will not need access features in mainstream products do not have to bear their costs. Nortel at 8. While Section 255 permits a manufacturer to ensure that its equipment is compatible with peripheral devices, it allows a manufacturer to take this route only after it has determined that incorporating access into its product is not readily achievable. Stated otherwise, under Section 255, a manufacturer may not seek compatibility as a means of compliance without first having explored accessibility solutions and having determined that such solutions are not readily achievable.

Similarly, CEMA has suggested that manufacturers should be allowed to either integrate features into mass-market equipment or produce specialized equipment for people

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comparison to a plethora of domestic and foreign voice telephone manufacturers. Inclusive at 2.

[14] Others parties to this proceeding also have recognized the importance of insuring that individuals with disabilities have flexibility in their choice of telecommunications products

with disabilities. See CEMA at 3. CEMA contends that it should be permitted to have this option because integrating accessibility features into standard equipment may be more expensive than producing such specialized equipment. Id. at 9-10. Again, however, the standard under Section 255 is whether or not incorporating access into mainstream equipment is readily achievable. So long as such access is, in fact, readily achievable, it is inconsequential that the creation of a specialized product may be cheaper for a manufacturer. In the past, the availability of only specialized products has proven costly and burdensome for individuals with disabilities. Section 255's mandate to incorporate access into the design of mainstream products and services is intended to put an end to this disparate treatment.

VI. Enhanced Services and Software are Covered by Section 255.

Some of the companies responding to the NOI have suggested that enhanced services be excluded from the coverage of Section 255. See ITIC at 9; Microsoft at 8. We strongly disagree. The very purpose of Section 255 would be negated under such circumstances.

Section 254 of the Telecommunications Act contains Congress' universal service mandate for all Americans to have access to both basic and advanced telecommunications services. In this section, Congress declared its commitment to ensuring that all Americans, including Americans with disabilities, have access to new and innovative technologies that are expected to redefine the way in which our country enjoys telecommunications services.

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and services, and the need to avoid limiting consumers' options to costly and specially designed assistive technology . See Pacific at 10.

Were the FCC to exclude all categories of enhanced service, this Congressional objective would not be fulfilled.[15]

Just as enhanced services are within the scope of Section 255, so too is software. Indeed, only a single commenter sought the exclusion of software from the access mandates. Microsoft at 10. To the extent that software is used to perform telecommunications functions, it should be included within the scope of equipment that must be accessible. Again, any other interpretation would seriously impair the goals of Section 255.

VII. The United States Should Provide a Model for World-Wide Accessibility

In our initial comments to the NOI, we urged the FCC to apply the accessibility requirements of Section 255 to foreign manufacturers. A number of parties to this proceeding agreed with us. See e.g., Pacific at 18 n.12; AFB at 7. Regulations promulgated under Section 255 should provide a model for other nations wishing to develop their own access requirements. Toward this end, we agree with companies that have urged the FCC to coordinate accessibility requirements with other nations. Nortel at

[15] CEMA points to a statement in the Senate report on the Telecommunications Act that interactive games or services involving interaction with stored information are information services, not telecommunications services covered by Section 255. CEMA at 6. CEMA then leaps to the conclusion that enhanced services are synonymous with information services, and are thus excluded from Section 255's coverage. But CEMA's analysis ignores the vast number of enhanced services which are not information-based, and which simply facilitate telecommunications. For example, call waiting, call forwarding, and Caller ID services have typically been considered "enhanced," rather than basic services. To exclude these and future technologies from the scope of Section 255 would continue to deny individuals with disabilities the extraordinary benefits which these technologies are bringing to our homes and offices.

7. As noted by Microsoft, access regulations should be as uniform as possible from nation to nation to avoid a "patchwork" of inconsistent standards. Microsoft at 12-13.

VIII. The FCC Should Develop a New Procedure for Formal Complaints under Section 255.

In its NOI, the Commission requested comment on the need for complaint procedures under Section 255 which are separate and apart from the procedures for filing informal and formal complaints under Section 208. Since the time that we filed our original comments, it has been brought to our attention that the cost of filing a formal complaint with the Commission under Section 208 is anywhere from $140 to $150. 47 C.F.R. §1.1105-1.c. At the time that the Commission promulgated its rules on telecommunications relay services under Section 225, it created an alternative procedure for the filing of formal complaints which excluded this charge. 47 C.F.R. §64.604(c)(5). Given the limited resources of individuals with disabilities, we urge the Commission to do the same for formal complaints filed under Section 255. Moreover, we urge the Commission to create a formal complaint process for Section 255 that is streamlined, i.e., consumers need to be assured that their complaints will not linger as new products and services continue to be developed at astonishing speeds.[16]

VIII. Conclusion

The need for FCC rules to implement the requirements of Section 255 cannot be overstated. Rules will provide uniform standards that will ensure consistency among

[16] An effective enforcement mechanism would also include the creation of an ombudsperson within the Commission, i.e., an individual or department that has special expertise on disability matters and that can play an active role in the resolution of complaints.